



## **Del Norte County's Japan Tsunami 2011 Del Norte EF-1 After Action Report**

**March, 2011**

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## Chapter 1: Overview

On the afternoon of March 11, 2011 an earthquake measuring 9.0 on the Richter Scale struck just off the coast of Japan triggering worldwide tsunami warnings and forcing the evacuation of low lying areas in Del Norte County including Crescent City, Klamath and Smith River. In Del Norte County the tsunami sank dozens of boats, caused millions of dollars of damage to the Crescent City Harbor, and took the life of a 25 year old man in Klamath who was swept out with two surviving friends while photographing the tsunami.

Del Norte County transportation resources were mobilized to assist with evacuation and reentry efforts, transporting dozens of evacuees to and from the evacuation zones. The transportation agencies of Coastline Enterprises, Del Norte Unified School District (DNUSD) Transportation and Redwood Coast Transit (RCT) activated a Departmental Emergency Operations Center (DEOC) and established unified command to seamlessly support transportation service requests from the County Emergency Operations Center.

The effectiveness of this coordinated transportation emergency response was the result of years of planning, training and exercises sponsored by the Del Norte Local Transportation Commission, the professionalism of Del Norte County transportation and emergency management officials, and the fortunate coincidence of having held an evacuation functional exercise for transportation just two days prior to this real-world disaster.

This After Action Report (AAR) details the disaster response activities of transportation and documents strengths and areas for improvement in the Del Norte transportation emergency management system.

## Chapter 2: Incident Objectives

The transportation objectives for this incident were:

### 1. Protection of staff

- Ensure that operational decisions consider the personal safety of drivers and other transportation staff
- Ensure that transportation staff understood disaster risk to themselves and their loved ones
- Ensure that all reasonable steps were taken to mitigate risks to transportation staff

### 2. Protection of passengers/public

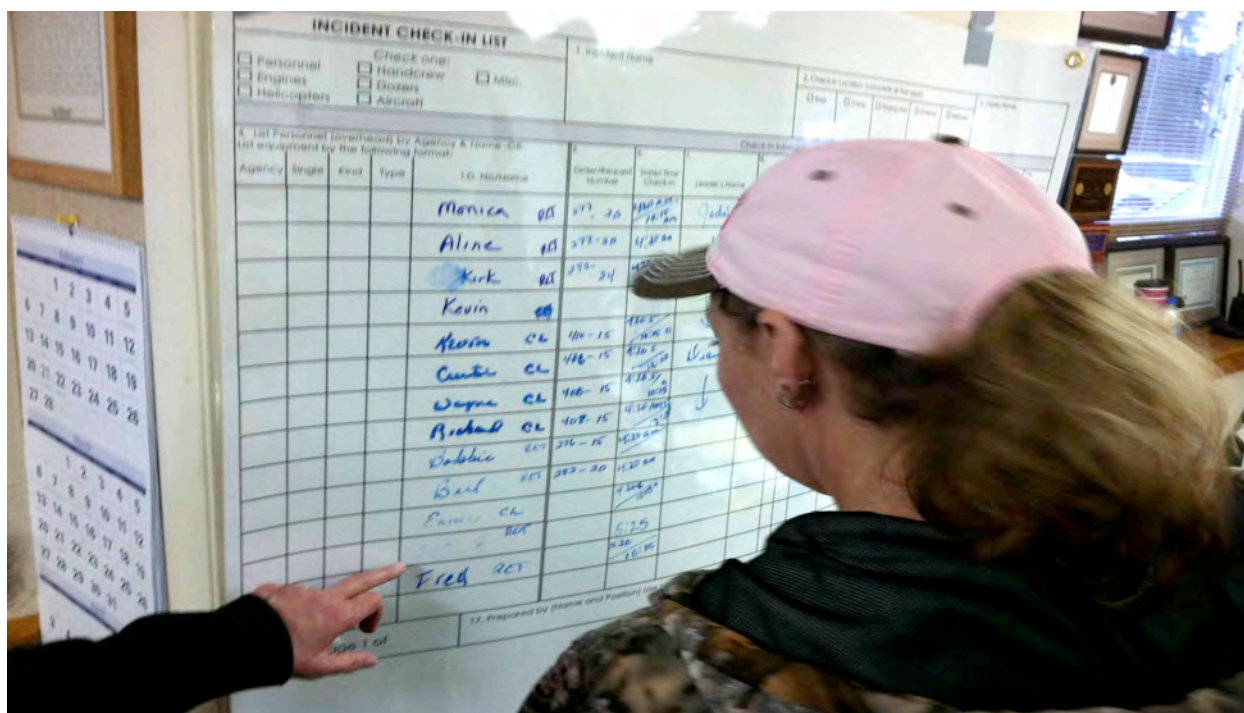
- Support requests from emergency services to safely transport evacuees out of the tsunami hazard zone
- Support safe transportation of evacuees returning home after evacuation orders were lifted

### 3. Protection of property

- Ensure that transportation vehicles, computer systems and other essential resources were moved and out of harm's way

### 4. Protection of the environment

- Ensure that fuel, cleaning supplies, and potentially toxic materials were secured



## Chapter 3: Event Synopsis

The most powerful earthquake on record struck the island nation of Japan at approximately 3:30 p.m. on Friday, March 11, 2011. The earthquake and tsunami caused widespread devastation in Japan, and triggered worldwide tsunami watches and warnings. The tsunami forced evacuation of low lying areas in Del Norte County including Crescent City, Klamath and Smith River.

- At approximately 2:10 a.m. RCT manager Jodi McNamer was contacted regarding the evacuation order and requesting mobilization of the EF-1 DEOC
- By 2:30 a.m. the DEOC was activated and McNamer assumed the role of DEOC Incident Commander. Pat Jensen with Del Norte Unified School District was established as the transportation liaison to the EOC
- At 3:10 a.m. the DEOC began notifying drivers requesting that they to report to work
- At 3:15 a.m. Coastline Enterprises was contacted to move equipment and critical data out of their offices on Front Street
- All RCT, DNUSD and Coastline staff had reported for duty by 4:20 a.m.
- At 4:30 a.m. drivers were initially dispatched to retrieve RCT and Coastline vehicles, which were parked within the inundation zone, and move them to the DEOC
- At 5:00 a.m. transportation resources were dispatched to the Crescent City Fire Hall and Crescent Elk Elementary, as well as to individual homes requesting evacuation assistance
- At 5:40 a.m. Jess Bingham with DNUSD was designated as the Safety Officer, and Rosanna Kent was designated as Plans Chief
- By 6:27 a.m. Smith River buses had returned to staging
- At 7 a.m. transportation ceased transportation operations in the inundation zone due to immanence of the hazard
- At 7:10 a.m. transportation facilitated a debriefing on lessons learned and critical concerns during evacuation
- At 7:20 a.m. the DEOC sent to Shop Smart for food, and contacted Logistics to request cots and blankets for driver rest and recovery
- By 7:40 a.m. an R&R station was established in school district Instructional Media Center near the DEOC
- At 7:50 a.m. food and water arrived for transportation staff
- At 9:30 a.m. drivers were asked to pre-trip all vehicles to ensure that they were properly fueled and ready for service when needed
- At 10:15 a.m. the DEOC released 50% of the driving staff to account for service continuity over multiple operational periods



- At 12 p.m. the DEOC released all but a couple drivers for R & R, but putting all staff on standby for reentry
- At 12:15 p.m. the DEOC released half of the management staff for R & R to account for continuity of management over multiple operational periods
- At 1 p.m. drivers who had been released first checked in regarding additional response orders
- At 3 p.m. the DEOC began pre-planning for staffing and resource needs for reentry
- At 4 p.m. drivers identified to support reentry were notified to remain on standby, and other driving staff were released
- At 5:20 p.m. the DEOC was advised to prepare for reentry
- At 5:34 p.m. evacuation orders in Del Norte County were lifted
- At 5:45 p.m. drivers reported for duty, pre-tripped their vehicles, and began providing service from the Crescent City High School into residential areas
- Ambulatory evacuees were dropped block by block. Disabled passengers were delivered door to door
- As of 7 p.m. all drivers had returned to the DEOC and debriefed on lessons learned on reentry
- As of 9 p.m. all transportation staff and resources were demobilized



## Chapter 4: Mission Outcomes

Del Norte County's transportation agencies effectively mobilized, and operated together seamlessly under unified command to marshal transportation resources. In doing so EF-1 successfully met all incident objectives:

### 1. **Protection of staff**

- Transportation mobilized, briefed staff, and managed transportation movement considering driver and staff safety

### 2. **Protection of passengers**

- Transportation safely transported dozens of ambulatory and non-ambulatory passengers out of the evacuation zone before the anticipated first surge, and back in when evacuation orders were lifted. Which vehicles were deployed for evacuation and reentry was determined by passenger needs, load capacity and safety. Multiple pets were permitted to board, contrary to normal transportation policy, to ensure that residents would heed evacuation orders. Drivers shared tactical information, such as where to collect certain individuals with disabilities based on day-to-day knowledge

### 3. **Protection of property**

- Transportation safely relocated all equipment out of the tsunami inundation zone, and moved equipment back to their respective facilities once evacuation orders were lifted

### 4. **Protection of the environment**

- Transportation secured fuel, cleaning supplies, and potentially toxic materials when evacuating/relocating to the DEOC



## Chapter 5: Conclusions

The Del Norte EF-1 DEOC Functional Exercise, that was coincidentally held just two days prior to the tsunami, provided a firm foundation for management of this real-world evacuation. There were, naturally, many lessons learned. Following is a brief synopsis of what worked well for EF-1 Transportation.

### Incident Command

- Del Norte transportation agencies did an excellent job of activating the EF-1 DEOC and establishing unified command
- The EF-1 Incident Management Team established incident objectives to help guide operational decisions
- As a result of past training and exercises, coordination and cooperation between the multiple agencies that comprised EF-1 did not present any challenges
- Incident leadership did an excellent job anticipating issues before they became problems. Examples include ordering food and water before drivers became famished, requesting cots for driver rest and recovery, developing staffing release plan early thereby ensuring availability for extended operations, and maintaining reserve fleet capacity to account for unanticipated transportation needs

### Safety

- Upon activation, the DEOC designated a safety officer to ensure safety of transportation personnel throughout the operation. The individual charged with this responsibility did an excellent job, due in part to his familiarity with the DNUSD transportation yard

### Emergency Public Information

- The DEOC considered who may be the best subject matter expert to support transportation-related emergency public information needs. There was not a clear decision regarding who might be the best person for this, though Pat Jensen or Rick Holly emerged as the two leading candidates
- The DEOC developed talking points regarding transportation's role in the emergency in case they were needed

### Liaison/Interagency Coordination

- Upon activation, the DEOC designated a liaison to the EOC. This helped with interagency communications and coordination, as well as situational awareness for DEOC leadership
- Drivers noted that they received excellent cooperation, support and respect from law enforcement



## **Operations**

- The DEOC did very well utilizing ICS charts and forms to track resources
- The DEOC did a great job of tracking mission assignments from service request to service completion
- The DEOC consistently developed contingency plans ensuring sufficient capacity for unanticipated transportation demands
- In the morning before evacuation service requests arrived, and again during the interlude between evacuation and reentry, operations staff prepped, fueled and performed pre-trip inspections of all equipment. This helped keep staff engaged, ensured the readiness of the equipment, and enabled the Finance/Admin Section to accurately calculate disaster-related expenses

## **Planning and Intelligence**

- The DEOC identified a Planning and Intelligence Section Chief to help develop Incident Action Plans for evacuation and reentry. In affect evacuation and reentry were each treated as an operational period
- The Planning Section Chief did an excellent job of tracking incident actions and lessons learned throughout the incident
- The Planning Section did a great job of developing plans for continuity of command and general staff over multiple operational periods
- Planning for reentry included establishing reentry zone routes, creating signage to put in each bus so passengers would know where each vehicle was going, providing a driver and a driver's assistant on every vehicle helped with communication and coordination with passengers and between operators/vehicles.

## **Logistics**

- The DEOC successfully procured food, water, cots and space for driver rest and recovery, along with other disaster-related logistical needs

## **Finance/Admin**

- The DEOC utilized appropriate forms to track hours, miles, and other disaster-related expenses. These will be reported to Del Norte Local Transportation Commission, and in turn to the Del Norte Office of Emergency Services for possible disaster reimbursement

## Chapter 6: Improvement Plan

Despite the success of transportation's response, there were numerous issues identified for improvement. Following is a brief synopsis of ways EF-1 Transportation anticipates improving its emergency operations plan:

### Incident Command

- The DEOC designated an Incident Commander (IC), Safety Officer, Liaison Officer, Plans Chief and Finance/Admin Chief. It did not designate a Deputy IC, Public Information Officer, Operations Chief, or Logistics Chief. Transportation will consider more specific checklists for each of these roles and responsibilities to help share work across all DEOC staff in the future
- All transportation staff working the incident should have incident management vests that identify them as Transportation along with the section and branch in which they are working. These vests should have pockets for necessary supplies
- All transportation staff should have name tags/credentials
- DEOC staff did not refer to their checklists with much frequency, particularly during the early stages of the emergency
- Some DEOC staff did not have their emergency operations binders including checklists, contact lists and other emergency resources. Additional binders will be created so that essential staff have versions of this binder at the office, at home, and in their cars

### Safety

- Transportation drivers are an excellent resource to help the DEOC and the EOC to maintain situational awareness – eyes and ears out in the community during the evacuation and reentry. This resource was not effectively utilized on this incident, and will be better tasked with this responsibility in the future
- The EOC sometimes made service requests that would put transportation resources in the tsunami inundation zone
- Drivers noted that they were sometimes assigned to vehicles that they were unfamiliar with. Fleetwide vehicle familiarization will be incorporated into future refresher training

### Emergency Public Information

- There were several instances where radio reports were giving inaccurate information about transportation options for evacuees. Establishing a better mechanism to provide subject matter expertise to the incident Public Information Officer should help ensure that accurate, timely and coordinated information is available during evacuations
- Activation of media monitoring and analysis would help the DEOC to maintain situational awareness, and identify inaccuracies in event coverage. Because the DEOC is a relatively small media market this can be accomplished with a single staffer. During this incident this role was performed by the 17 year old daughter of

Coastline Enterprises Executive Director Diane Dickey. For future incidents this role might be performed by the Del Norte Local Transportation Commission Executive Director. The Executive Director might also be tasked with writing the After Action Report on behalf of EF-1.

## **Liaison/Interagency Coordination**

- Transportation designated an agency representative to the EOC, which helped provide smooth coordination between incident management and transportation during this disaster. However, it would have been difficult to sustain staffing for this position along with other essential DEOC functions for multiple operational periods. Additional thought will be given to continuity of management
- The decision by the county to establish an evacuation ICP away from the EOC resulted in the DEOC having limited situational awareness during the disaster. More frequent updates from the agency representatives at the ICP and the EOC would help the DEOC to make decisions that more accurately consider disaster risks
- Transportation service requests were sometimes coming from multiple sources creating chaos in the DEOC. In the future the DEOC will designate one central source – the deputy IC, with a dedicated phone line for the EOC and ICP – to field all service requests and coordinate with the evacuation ICP
- Interagency coordination from the DEOC was sometimes hampered by outdated emergency contact lists. An updated list has now been shared with DEOC leadership. This stakeholder list should be undated semi-annually

## **Operations**

- During relocation to the DEOC Coastline Enterprises unplugged and transported their computer towers. RCT did not remember to do this until it was too late. While the data on the RCT computers is largely backed up to First Transit, the loss of their computer capabilities would have significantly impacted reconstitution
- At the start of the incident the EOC directed transportation resources to staging at Crescent Elk Elementary, the Crescent City Fire Hall, and the DNUSD Transportation yard. While this deployment was consistent with local emergency operations plans, it made resource tracking and management difficult for the DEOC. For future incidents transportation intends to stage all resources at the DEOC and dispatch directly to collection points based on service requests from the EOC
- One of the early mission assignments directed RCT to transport two non-ambulatory passengers to the First Baptist Church in south Crescent City. When the driver arrived at the church it was locked up, and there was nobody staffing this ‘reception center. This forced the driver to backtrack wasting valuable time and resources. For future disaster incidents it may be helpful to send advance teams to shelter locations to ensure they are operational prior to sending transit vehicles and evacuees there
- During the lull that followed evacuation, drivers grew restless. The DEOC determined to have them pre-trip the vehicles and handle refueling or other issues needed for vehicle readiness, then ultimately released them to return home but remain on standby. For future incidents the DEOC will have drivers post-trip all

vehicles at the end of evacuation, debrief on lessons learned during evacuation, and release them to rest at home so they are ready for reentry

- Knowing where evacuees were going during reentry was sometimes a challenge. In the future the DEOC will work with the care and shelter branch to have evacuees sign up for reentry transportation when they arrive at the shelter. Reentry routes will be designated by color, and evacuees will be provided a correspondingly colored bracelet

## **Planning and Intelligence**

- The planning section chief lacked sufficient training in developing Incident Action Plans and Situation Reports. Use of IAPs and SitReps is an important component of effective emergency operations. Providing ICS 300/400 training for senior staff will help remediate this concern
- Having a scanner at the DEOC would have greatly improved situational awareness. A scanner will be purchased and installed in the DEOC for future use
- In the future drivers will be tasked with reporting what they see during their rounds, thereby helping the DEOC and the EOC to maintain situational awareness

## **Logistics**

- Drivers did not have credentials identifying them as transportation staff. This did not present a problem during this incident, but could have. Staff credentials will be developed and issued
- Interoperability of radio communications was a major problem for transportation, as the school district, RCT and Coastline are on different systems and unable to communicate with each other. Grant funding has been awarded to purchase an improved radio system, but this purchase has not yet been finalized. This should be resolved as soon as possible with the purchase and programming of a radio system that provides interoperability between Del Norte and Curry County transportation resources as well as local emergency management and first responders
- Procuring meat trays, veggie trays and water for EF-1 staff ended up being a significant expense. School District staff plans to request a cost reduction from the manager of the Shop N Save, and negotiate a contingency contract for future emergency food supplies. A contingency contract may also be negotiated for pizza during emergency events
- It may have been possible to utilize the school district kitchen to feed emergency operations staff. This will be considered for future disaster incidents
- Securing cots from the American Red Cross improved the rest and recovery comfort for transportation drivers. Unfortunately these cots did not come with blankets
- As the DEOC did not designate a Logistics Section Chief to identify and procure essential resources such procurements were sometimes a bit of a “hot potato”. Designation of a logistics chief should help resolve this issue for future incidents

## **Finance/Admin**

- Providing a sign in sheet for all reporting staff would provide a secondary source for tracking active staff and for tracking disaster related costs
- Establishing pre-incident contracts for food, water, coffee, and other essential material supply will help improve incident cost containment and the speed with which they are delivered
- The small amount of petty cash transportation had on hand was insufficient for the disaster, which was indeed short in duration. Strategies for securing additional cash for incidental disaster expenses will be developed